10/789,044

**PATENT** 

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Kie Y. Ahn et al.

Examiner: Douglas Menz

Serial No.:

10/789,044

Group Art Unit: 2829

Filed:

February 27, 2004

Docket: 1303.070US2

Title:

LANTHANIDE DOPED TiOx DIELECTRIC FILMS

## RESPONSE TO RESTRICTION REQUIREMENT

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

In response to the Restriction Requirement mailed March 21, 2005, Applicant hereby elects Species I (claims 1-4). Applicant acknowledges that the Examiner has indicated that claim 1 is generic. Applicant reserves the right to reintroduce the non-elected claims 5-40 in this application upon allowance of a generic claim or linking claim, or to reintroduce them in one or more divisional application at a later date.

The Examiner is invited to telephone Applicant's attorney at (612) 371-2157 to facilitate the prosecution of this application. If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

KIE Y. AHN ET AL.

By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

P.O. Box 2938

Minneapolis, MN 55402

(612) 371-2157

Date 14 April 2005

By

David R Cochran Reg. No. 46,632

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this \_\_\_\_\_\_ day of April, 2005.

KACIA LEE

Signature Lee

Name



#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Kie Y. Ahn et al.

Examiner: Douglas M. Menz

Serial No.:

10/789,044

Group Art Unit: 2829

Filed:

February 27, 2004

Docket: 1303.070US2

Title:

LANTHANIDE DOPED TIOX DIELECTRIC FILMS

# **COMMUNICATION CONCERNING RELATED APPLICATION(S)**

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Applicants would like to bring to the Examiner's attention the following related application(s) in the above-identified patent application:

Serial/Patent No. 10/789042	Filing Date February 27, 2004	Attorney Docket 1303.050US2	Title ATOMIC LAYER-DEPOSITED LaAlO3 FILMS FOR GATE DIELECTRICS
11/036296	January 14, 2005	1303.030US2	LOW-TEMPERATURE GROWN HIGH QUALITY ULTRA-THIN CoTiO3 GATE DIELECTRICS
10/909959	August 2, 2004	1303.114US1	ATOMIC LAYER DEPOSITION OF ZIRCONIUM-DOPED TANTALUM OXIDE FILMS
10/863953	June 9, 2004	1303.031US2	HIGHLY RELIABLE AMORPHOUS HIGH-k GATE DIELECTRIC ZrOxNy
10/931533	August 31, 2004	1303.119US1	ATOMIC LAYER DEPOSITED TITANIUM ALUMINUM OXIDE FILMS
10/926812	August 26, 2004	1303.121US1	RUTHENIUM GATE FOR A LANTHANIDE OXIDE DIELECTRIC LAYER
10/930167	August 31, 2004	1303.122US1	ATOMIC LAYER DEPOSITED LANTHANUM ALUMINUM OXIDE DIELECTRIC LAYER
10/929272	August 30, 2004	303.802US2	ATOMIC LAYER DEPOSITION AND CONVERSION

# COMMUNICATION CONCERNING RELATED APPLICATIONS Serial Number: 10/789,044 Filing Date: February 27, 2004 Title: LANTHANIDE DOPED TIOX DIELECTRIC FILMS

Page 2 Dkt: 1303.070US2

10/930138	August 31, 2004	1303.044US2	EVAPORATION OF Y-Si-O FILMS FOR MEDIUM-k DIELETRICS
10/930184	August 31, 2004	1303.021US2	CRYSTALLINE OR AMORPHOUS MEDIUM-K GATE OXIDES, Y2O3 AND GD2O3
10/930516	August 31, 2004	1303.078US2	ATOMIC LAYER DEPOSITED HISION DIELECTRIC FILMS
10/931341	August 31, 2004	1303.082US2	ATOMIC LAYER DEPOSITED ZR-SN- TI-O FILMS USING TiI4
10/930431	August 31, 2004	1303.056US2	ATOMIC LAYER-DEPOSITED HfAIO3 FILMS FOR GATE DIELECTRICS
10/931365	August 31, 2004	1303.059US2	Pr2O3-BASED La-oxide GATE DIELECTRICS
10/931364	August 31, 2004	1303.069US2	LANTHANIDE DOPED TIOX DIELECTRIC FILMS BY PLASMA OXIDATION
10/931343	August 31, 2004	1303.101US2	LANTHANIDE OXIDE / HAFNIUM OXIDE DIELECTRIC LAYERS
10/931340	August 31, 2004	1303.107US2	LANTHANIDE OXIDE / HAFNIUM OXIDE DIELECTRICS
10/931356	August 31, 2004	1303.026US2	HIGHLY RELIABLE AMORPHOUS HIGH-K GATE OXIDE ZrO2
11/010529	December 13, 2004	1303.126US1	ATOMIC LAYER DEPOSITED LANTHANUM HAFNIUM OXIDE DIELECTRICS
11/029757	January 5, 2005	1303.127US1	ATOMIC LAYER DEPOSITED HAFNIUM TANTALUM OXIDE DIELECTRICS
11/031289	January 7, 2005	1303.069US3	LANTHANIDE DOPED TiOx DIELECTRIC FILMS BY PLASMA OXIDATION
	10/930184 10/930516 10/931341 10/931365 10/931364 10/931343 10/931340 10/931356 11/010529 11/029757	2004  10/930184 August 31, 2004  10/930516 August 31, 2004  10/931341 August 31, 2004  10/931365 August 31, 2004  10/931364 August 31, 2004  10/931343 August 31, 2004  10/931340 August 31, 2004  10/931356 August 31, 2004  10/931356 August 31, 2004  11/010529 December 13, 2004  11/029757 January 5, 2005  11/031289 January 7,	2004  10/930184 August 31, 1303.021US2 2004  10/930516 August 31, 1303.078US2 2004  10/931341 August 31, 1303.082US2 2004  10/930431 August 31, 1303.056US2 2004  10/931365 August 31, 1303.059US2 2004  10/931364 August 31, 1303.069US2 2004  10/931340 August 31, 1303.101US2 2004  10/931356 August 31, 1303.107US2 2004  10/931356 August 31, 1303.107US2 2004  11/010529 December 1303.126US1 13, 2004  11/029757 January 5, 1303.127US1 2005

MUNICATION CONCERNING RELATED APPLICATIONS

Number: 10/789,044 ning Date: February 27, 2004

Title: LANTHANIDE DOPED TIOX DIELECTRIC FILMS

Page 3 Dkt: 1303.070US2

11/059594	February 16, 2005	1303.046US2	EVAPORATED LaAlO3 FILMS FOR GATE DIELECTRICS
11/092072	March 29, 2005	1303.135US1	ALD OF AMORPHOUS LANTHANIDE- DOPED TIOX FILMS
	March 29, 2005	1303.136US1	ATOMIC LAYER DEPOSITED TITANIUM SILICON OXIDE FILMS
11/084968	March 21, 2005	1303.083US2	Zr-Sn-Ti-O FILMS

Continuations and divisionals may be later filed on the cases listed above, or cited to the Examiner in any previous Communication Concerning Related Applications. Applicant requests that the Examiner review all continuations and divisionals of the above-listed or previously-cited patent applications before allowing the claims of the present patent application.

Respectfully submitted,

KIE Y. AHN ET AL.

By Applicants' Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

P.O. Box 2938

Minneapolis, MN 55402

(612) 371-2157

Date 19 April 20

By

David R. Cochran

Reg. No. 46,632

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 14 day of April, 2005.

FACIA LEE

Signature